## **EXECUTIVE SUMMARY**

Indonesia ranked twenty-first among world oil producers, with approximately 1.3% of the world's daily production in 2006. In 2006 Indonesia produced an average 1,005,810 barrels per day (bpd) of petroleum crude and condensate, according to government figures. According to the unofficial government statistics, Indonesian production fell to 912,000 bpd in 2007.

Indonesia's production of crude oil and condensate continues its multi-year trend of gradual decline from a high of 1.5 million bpd in 1999 to 1.25 million bpd in 2002, 1.15 million bpd in 2003, 1.09 million bpd in 2004, and 1.06 million bpd in 2005. Indonesia's proven oil reserves are approximately 4.44 billion barrels, according to official data.

Indonesia ranks eighth in world gas production, with proven reserves of 93.95 trillion cubic feet (TSCF) in 2006. Proven reserves fell nine percent in 2006 compared with 2005. Indonesia produced 2.95 TSCF in 2006, down 1% from 2005. Minister of Energy and Mineral Resources Purnomo Yusgiantoro said in January 2008 that the government is targeting natural gas production to reach 1.169 barrels of oil equivalent per day (boepd), up marginally from 2007 output of 1.120 boepd.

Indonesia lost its status as the world's largest exporter of liquefied natural gas (LNG) to Qatar in 2006. Indonesia produced 22.4 million tons of LNG in 2006. In 2006, the government announced a policy to re-orient natural gas production to serve domestic needs. As a result, Indonesia's share of the world LNG market has shrunk from 18.8% in

2004 to 14% in 2006. Rapid rates of new production in Qatar, Australia and Russia are likely to continue to erode Indonesia's position.

Despite the gradual decline in oil production, the industry remains a key sector in Indonesia's economy that generates strong cash flows. In 2006 oil and gas generated \$21.2 billion in government revenue, 22% of exports, and 24% of the government's budget. Though significant, this contrasts starkly with 1990, when the oil and gas sector contributed 43% of export earnings and 45% of government revenues.

In April 2008 executive and legislative branch representatives agreed on a revised budget that targeted 927,000 bpd in production during 2008. That budget also raised the assumed oil price to \$95/barrel.

As a symbol of its commitment to sound macroeconomic policy, the government reduced fuel subsidies across the board first in March 2005 and again in October 2005. High global oil prices raised the actual 2005 fuel subsidy to Rp. 76.5 trillion, however. Since then continued sustained high world prices and the government's policy to maintain existing subsides have swamped the savings realized in 2005, and Indonesia was again forced to raise fuel prices in 2008. The government subsidizes about 60 percent of the fuel consumed in Indonesia.

In its mid-year budget revision for FY 2008, the government asked for 180.3 trillion rupiah for fuel subsidies (\$19.7 billion), an increase of 294 percent from the original request of 45.8 trillion rupiah in 2007.

Upstream and downstream oil and gas deregulation continues as required by Law 22/2001, which replaced the 1960 Oil and Gas Law and the Law for Pertamina 8/1971. The law mandated the end of Pertamina's monopoly over downstream oil distribution and marketing of fuel products and shifted regulatory functions to the central government. The government issued the upstream and downstream implementing regulations in 2004.

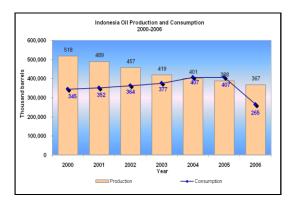
The law created two new governmental bodies: the Upstream Executive Body (BP Migas) that assumed Pertamina's upstream functions and the Downstream Regulatory Body (BPH Migas) that supervises downstream operations. BP Migas commenced operations in July 2002, taking over Pertamina's upstream regulatory functions and management of oil and gas contractors. BPH Migas started work in December 2002.

In May 2006 Indonesia suffered a major environmental incident when a mudflow began from a wellhead at the Brantas PSC in East Java, which at the time belonged to Energi Mega Persada. The company contends that unrelated seismic activity caused the wellhead blow out, not negligent drilling practices, as some community activists and NGOs charged. Roughly 50,000 people have been displaced and 30 factories have been forced to shut down, according to government information. The mudflow has caused approximately 7.3 trillion (\$797.8 million) in infrastructure damage through 2007, according to GOI estimates. Geologic experts say the mudflow may continue for years or perhaps even decades.

## In 2005-2006

- The dollar value of oil and gas exports increased to \$21.2 billion in 2006 compared with \$19.2 billion in 2005, \$17.6 billion in 2004, and \$15.2 billion in 2003.
- Oil and gas imports also increased to \$18.98 billion in 2006 compared with \$17.4 billion in 2005, \$12.1 billion in 2004, and \$8.4 billion in 2003.

### **Crude Oil**



#### 2006

Proven Reserves: 4.4 billion barrels Production: 1.006 million bpd Export revenue: \$21.2 billion

Indonesia's crude oil production declined 5% in 2006 to an average of 1.006 million bpd. In 2005, Indonesia produced an average of 1.06 million bpd. Falling output by most of the country's major producers accounted for the 56,000 bpd production drop in 2006. Foreign PSCs accounted for 82% of Indonesia's crude output in 2006.

Petroleum companies increased their exploration spending by 4.7 percent in 2004 to \$5.56 billion from \$5.31 billion in 2003. As this publication went to press, official data on exploration spending for 2005 and 2006 was not available. The

number of new exploration wells drilled in 2006 was down significantly to 35 from 68 in 2005, both of which are a precipitous decline from the 145 wells drilled in 1998.

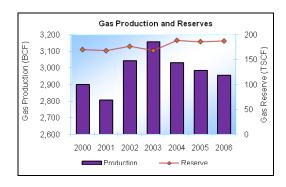
Indonesia awarded nine oil and gas blocks in March 2007, compared with 27 in June 2006, 9 in 2005, 16 in 2004, and 15 in 2003. Major international firms, including U.S. companies, expressed strong interest in the 2006 and 2007 blocks on offer.

Indonesian crude producers continued to profit from high world oil prices, which averaged \$68.93 per barrel in 2007 for benchmark SLC and \$64.28 in 2006, up sharply from \$53.10 in 2005 and significantly above the 2004 average of \$36.60 and the 2003 price of \$18.00. The outlook remains strong in 2008 with prices averaging well over \$100 per barrel in the first half of the year.

OPEC decided to increase oil production in July 2005 and consequently increased Indonesia's November 2003 quota of 1.270 million to 1.451 million bpd. Indonesia does not benefit from the cartel's decision, however, since it has produced significantly below this level for the last eight years.

Indonesia's major crude oil customers in 2006 (in rank order) were Japan, South Korea, Australia, China, and the United States. Indonesia's overseas markets have exhibited declining sales volumes since 2002. Exports declined 15% by volume from 2005.

### **Natural Gas**



#### 2006

Proven Reserves: 93.95 TSCF Production: 2.954 BSCF Export revenue: \$10.5 billion

Indonesia has natural gas reserves of 274.3 TSCF – 93.95 TSCF proven and 93.14 TSCF possible. Possible reserves jumped 110% from 2005, according to government statistics. Indonesia's largest producers in 2006 (in order) were Total, Pertamina, ConocoPhillips, ExxonMobil, VICO, BP, Petrochina, and Chevron, all of which operate under production sharing contracts and account for 90 percent of the country's total production.

Indonesia has traditionally exported gas in the form of LNG, but started natural gas pipeline exports to Singapore in January 2001 and inaugurated the Sumatra-Singapore pipeline in late 2003. The major uses for Indonesia's natural gas are LNG and LPG production, domestic power generation, and fertilizer and petrochemical production.

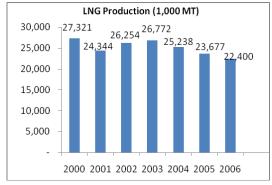
In 2006, the government announced a policy re-orienting natural gas production to serve primarily the domestic electric power market. Government ministers said Indonesia will honor all existing contracts but not necessarily renew current ones as they expire between 2008 and 2011.

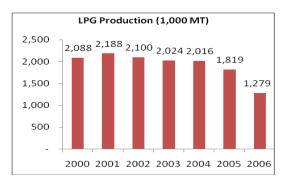
### LNG and LPG

Indonesia lost its title to Qatar as the world's leading exporter of LNG in 2006, according to media reports and industry analysts. Its share of world production dropped from 18.8% in 2005 to 14% in 2006. Indonesia exported 46.1 million tons of LNG in 2006, according to government data. LNG production at Arun and Badak (Bontang) was 22.4 million metric tons (MT) in 2006, a decrease from the 2005 production level of 23.7 million MT. Japan, South Korea and Taiwan were the key markets for LNG.

LPG production declined precipitously to 1.279 million MT in 2006 from 1.818 million MT in 2005, while exports declined from 1.015 million MT in 2005 to 254,700 MT in 2006. Declining exports to Japan accounted for the largest drop from 865,000 MT in 2005 to 39,900 MT in 2006.

LNG and LPG Production 2000 - 2006





BP said that it expects to begin LNG production at its Tangguh facility in Papua in late 2008 and begin deliveries to customers in early 2009. BP officials are considering additional production trains, according to media reports.

In late 2007, Pertamina told Japanese LNG buyers that it would only offer them a maximum of 3 million MT per year in their new 10-year contracts when the current ones totaling 12 million MT per annum expire in 2010.

In the first quarter of 2008, the government announced that it had terminated ExxonMobil's rights to develop the 46 TSCF off-shore Natuna D-Alpha gas field and appointed state oil company Pertamina to run the project. The government said ExxonMobil failed to show sufficient progress in developing the field. ExxonMobil officials pointed to their expenditure of approximately \$400 million for exploration activities and asserted its contract gave the firm the right to an extension until 2009. Industry analysts generally share the opinion that Pertamina has neither the financial nor technical expertise to develop the Natuna field on its own.

## **Refining and Imports**

Indonesia has an installed refining capacity of approximately 1.056 million bpd at nine state-run refineries. Capacity utilization was 90.8% through the end of 2006, down from 94.7% in 2004.

Indonesia's crude oil imports dropped sharply in 2006 to 116.2 million barrels from 148.5 million in 2004. Saudi Arabia, Brunei, and Nigeria are the major suppliers. Fuel product imports dropped to 133.4 million barrels in 2006, down

from 165.7 million in 2005 and 154.4 million in 2004.

Growing domestic consumption combined with limited capacity at Indonesia's nine refineries account for the sustained high levels of crude oil and fuel product imports since 2000.

Domestic fuel consumption was 42.1 million kiloliters (equivalent to 725,244 barrels of oil per day) in 2006, compared with 64.7 million kiloliters in 2005, a drop of 35%. Pertamina continues to retain its monopoly on the distribution of subsidized fuel throughout the archipelago due to lack of interest by other companies in assuming this public service obligation.

### **Petrochemicals**

The petrochemical industry has yet to recapture its pre-1998 dynamism. Indonesia completed no new plants during the past four years, and as a result they increased imports of petrochemical products. Lack of gas also hindered fertilizer production and resulted in the suspension of production at Pupuk Iskandar Muda, PIM I and the liquidation of the ASEAN Aceh Fertilizer plant (AAF) in 2003. However, the completion of the Tuban petrochemical project in 2006 signaled the stirrings of a slow recovery for the industry. Since 2005, Indian, Japanese, and Chinese investors have expressed strong interest in investing in this sector.

## Oil Revenue Sharing

On January 1, 2001, Regional Autonomy Law 22/1999 and Fiscal Decentralization Law 25/1999 came into effect. Law 25/1999 contains formulas for sharing revenue between the central government and various regional authorities. On October 15, 2004, the GOI amended these laws with Regional Autonomy Law 32/2004 and Fiscal Decentralization Law 33/2004 to further clarify the roles of central and regional authorities. These new laws also changed the revenue sharing splits between the central government and regional authorities. They also contained more detailed procedures for revenue sharing and regional autonomy implementation. Regulation 55/2005, issued on December 9, 2005, implemented the new laws.

Revenue sharing is the division of funds from oil and gas revenues between central and local government. Oil revenue-sharing is based on net oil and gas revenue, after cost recovery and the deduction of the PSC's share but before tax. The allocation of funds for revenue-sharing is based on the actual, realized oil and gas revenue. This means that it is derived from oil revenues accounted from the state-owned oil company, Pertamina, plus any additional non-tax revenues obtained directly from oil producers, and based on the actual price received and quantity generated.

Revenue sharing in oil and gas was established by statute in accordance with Article 11, Law No. 33/2004 and GR No. 55/2005. The following are the changes in revenue sharing allocation for resource-related activities between the old (1999) and new (2004) laws:

# Shares of state revenue\* based on Law No. 25/1999

Type of revenue	Central Govt.	Province	Regency
		(%)	
- Oil	100	-	-
- Natural gas	100	-	-
- Mining land rent	20	16.0	64.0
- Mining royalties	20	16.0	64.0
<ul> <li>Land/building tax</li> </ul>	10	16.2	64.8
<ul> <li>Duties on land/ building acquisition</li> </ul>	20	16.0	64.0

# Shares of state revenue\* based on Government Regulation No. 55/2005

- Oil	85	3.0	12.0
- Natural gas	70	6.0	24.0
- Mining land rent	20	16.0	64.0
- Mining royalties	20	16.0	64.0
- Land/building tax	10	16.2	73.8
- Duties on land/ building acquisition	20	16.0	64.0

<sup>\*</sup> State revenue refers to net oil and gas profits after PSC share and cost recovery are deducted.

Aceh and Papua, as special autonomy provinces, receive 70 percent of oil revenues and natural gas revenues created in their regions (Law No. 18/2001 and Law No. 21/2001, correspondingly).

With rising oil and gas prices, transfers to oil producing regions have more than doubled since 2003. Although revenues have increased substantially, they remain low compared to the increase in oil and gas prices during the same period.

A persistent problem has been the misunderstanding of the calculations of oil and gas revenues by sub-national government officials, which has led many regional administrations and their citizens to overestimate the value of future transfers. To clarify the regions' share of oil and gas revenues, the Ministry of Finance began the practice in 2005 to issue a yearly decree estimating the

allocation of oil and gas revenues to the all of the provinces, regencies, and cities.

## **Major Events in Indonesia**

Year	Events
_ I cai	Telaga Said production field sold to a
1890	company that later merged to form Royal
	Dutch Shell. First production was in 1892.
	Standard Oil of New Jersey through its
1912	Dutch subsidiary received permission to
	explore for oil in South Sumatra.
1921	The Talang Akar field discovered, which
	proved to be the biggest find before WWII.
1942	Japanese took over most oil fields during
	WWII and slow production
1944	Caltex' Minas field discovered. Largest oil
	field in Southeast Asia
10.45	Indonesia declared independence from The
1945	Netherlands
1061	Government signs first PSC, with Asamera
1961	for the Block A PSC in Aceh.
1962	Pan American Oil Company signed the first
1902	contract of work with Pertamina.
1962	Indonesia joined OPEC
1968	National oil companies Pertamina and
1908	Pertamina merged to form Pertamina
1978	First LNG plant entered production
2001	The Government revised Oil and Gas Law
2002	Upstream and Downstream bodies formed.
2003	Pertamina becomes a limited liability
2003	company.
2004	GOI issued upstream and downstream
	implementing regulation, Regulation No.
	35 and 36 respectively.
2005	The first private retail fuel station opened in
	Indonesia.